

Anza-Borrego Desert State Park®

Preliminary General Plan & Final Environmental Impact Report

SCH # 2002021060



ARNOLD SCHWARZENEGGER

GOVERNOR OF CALIFORNIA

MIKE CHRISMAN

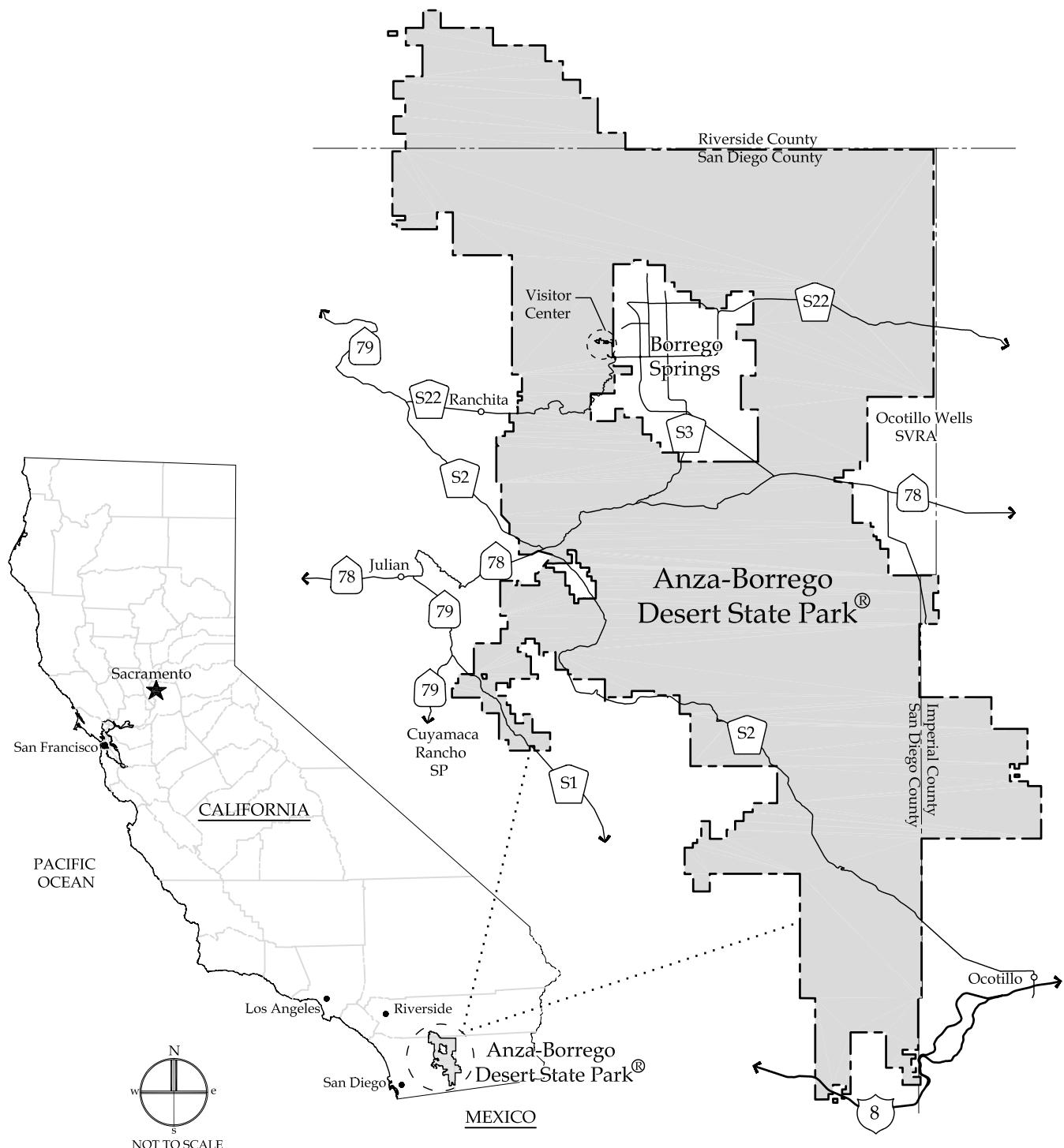
SECRETARY FOR RESOURCES

RUTH COLEMAN, DIRECTOR

CALIFORNIA STATE PARKS

PO Box 942896
Sacramento, CA 94296-0001

Location Map



This map depicts general mapping boundaries. Every reasonable effort has been made to assure the accuracy of this map. However, this map and data are generalized and not survey based. Private land/ inholdings may not always be indicated on these maps.

- Executive Summary
- Preface
- 1 Introduction
- 2 Existing Conditions
- 3 The Plan
- 4 Environmental Analysis
- 5 Tables
- 6 Figures
- 7 Acronyms
- 8 Bibliography
- 9 Appendices
- Index
- Kudos

1 Introduction

1.1	INTRODUCTION TO THE PARK	1-3
1.1.1	DESCRIPTION	1-3
1.1.2	LOCATION.....	1-4
1.1.3	PURPOSE ACQUIRED	1-4
1.1.4	SPIRIT OF PLACE	1-5
1.2	PURPOSE OF GENERAL PLANS	1-6

2 Existing Conditions

2.1	PARK SUMMARY	2-3
2.1.1	LAND USE.....	2-3
2.1.2	FACILITIES	2-3
2.1.3	ADJACENT LAND USE	2-3
2.1.3.1	<i>Native American Land</i>	2-3
2.1.3.2	<i>Federal Land</i>	2-4
2.1.3.3	<i>Other Parks</i>	2-5
2.1.3.4	<i>Other State-Owned Land</i>	2-6
2.1.3.5	<i>Private Operations</i>	2-6
2.1.3.6	<i>International Land</i>	2-7
2.1.3.7	<i>Transportation Corridors</i>	2-8
2.1.4	LAND ACQUISITION	2-9
2.1.5	PARK SUPPORT—ORGANIZATIONS AND VOLUNTEERS	2-9
2.1.5.1	<i>Park Support Organizations</i>	2-9
2.1.5.2	<i>Park Support Volunteers</i>	2-10
2.2	PRIMARY RESOURCES	2-11
2.2.1	PHYSICAL RESOURCES	2-11
2.2.1.1	<i>Topography</i>	2-11
2.2.1.2	<i>Geology</i>	2-12
2.2.1.3	<i>Soils</i>	2-21
2.2.1.4	<i>Meteorology</i>	2-22
2.2.1.5	<i>Hydrology</i>	2-27
2.2.2	BIOTIC RESOURCES	2-31
2.2.2.1	<i>Paleontology</i>	2-31
2.2.2.2	<i>Biota</i>	2-35
2.2.2.3	<i>Sensitive Biota</i>	2-42
2.2.2.4	<i>Exotic Species</i>	2-57
2.2.3	CULTURAL RESOURCES	2-61
2.2.3.1	<i>Prehistoric and Ethnographic Overview</i>	2-61
2.2.3.2	<i>Historical Summary</i>	2-69
2.2.3.3	<i>Designated Historical Resources</i>	2-77
2.2.4	AESTHETIC RESOURCES	2-78
2.2.4.1	<i>Special Qualities</i>	2-79
2.2.5	INTERPRETIVE AND EDUCATIONAL RESOURCES	2-82
2.2.5.1	<i>Facilities</i>	2-82
2.2.5.2	<i>Personal Interpretive Programming</i>	2-82

2.2.5.3	<i>Self-directed Interpretive Programming</i>	2-83
2.2.6	COLLECTIONS RESOURCES.....	2-84
2.2.6.1	<i>Introduction</i>	2-84
2.2.6.2	<i>Major Interpretive Themes, Topics, and/or Periods of the Collection</i>	2-85
2.2.6.3	<i>Collection History</i>	2-85
2.2.6.4	<i>Collection Content Summary</i>	2-86
2.2.6.5	<i>Uses of the Collection</i>	2-87
2.2.6.6	<i>Relationship of Collection to Other State Parks and Non-State Park Institutions</i>	2-87
2.2.7	RECREATIONAL RESOURCES	2-88
2.2.7.1	<i>The Visitor Experience</i>	2-88
2.2.7.2	<i>Current Visitor Information</i>	2-88
2.2.7.3	<i>Recreational Infrastructure</i>	2-89
2.3	PLANNING INFLUENCES	2-93
2.3.1	SYSTEM-WIDE PLANNING INFLUENCES	2-93
2.3.2	RESOURCE MANAGEMENT DIRECTIVES	2-94
2.3.3	REGIONAL PLANNING INFLUENCES	2-94
2.3.3.1	<i>Regional Plans</i>	2-94
2.3.3.2	<i>U.S. Fish and Wildlife Service</i>	2-95
2.3.3.3	<i>California Department of Fish and Game</i>	2-95
2.3.3.4	<i>California Department of Transportation</i>	2-95
2.3.3.5	<i>Landscape Linkages</i>	2-95
2.3.4	VISITATION	2-96
2.3.5	PUBLIC INVOLVEMENT.....	2-98
2.3.5.1	<i>Visitor Study</i>	2-99
2.4	ISSUES	2-101
2.4.1	PHYSICAL RESOURCE ISSUES	2-101
2.4.2	BIOTIC RESOURCE ISSUES	2-102
2.4.3	CULTURAL RESOURCE ISSUES.....	2-103
2.4.4	AESTHETIC RESOURCE ISSUES	2-105
2.4.5	INTERPRETIVE AND EDUCATIONAL RESOURCE ISSUES.....	2-105
2.4.6	COLLECTIONS ISSUES.....	2-106
2.4.7	RECREATIONAL ISSUES	2-106
2.4.8	FACILITIES AND PARK OPERATION ISSUES	2-108
2.4.9	LAND ACQUISITION ISSUES.....	2-108
2.4.10	ADJACENT LAND USE ISSUES	2-109

3 Plan

3.1	PLAN OVERVIEW	3-3
3.2	PARK-WIDE MANAGEMENT DEFINED	3-3
3.2.1	DEPARTMENT MISSION	3-3
3.2.2	CLASSIFICATION	3-4
3.2.3	PARK PURPOSE, MISSION, AND VISION.....	3-5
3.2.3.1	<i>Declaration of Purpose.....</i>	3-5
3.2.3.2	<i>Park Mission Statement</i>	3-6

3.2.3.3	<i>Vision Statement</i>	3-7
3.2.4	MANAGEMENT ZONES	3-8
3.2.4.1	<i>Information/Entrance Zone.....</i>	3-8
3.2.4.2	<i>Focused-Use Zone I (FUZ I).....</i>	3-9
3.2.4.3	<i>Focused-Use Zone II (FUZ II)</i>	3-11
3.2.4.4	<i>Backcountry Zone (BZ)</i>	3-13
3.2.4.5	<i>Wilderness Zone (WZ).....</i>	3-15
3.2.4.6	<i>Cultural Preserve Zone.....</i>	3-17
3.3	GOALS AND GUIDELINES	3-19
3.3.1	PARK-WIDE GOALS AND GUIDELINES	3-19
3.3.1.1	<i>Data Driven Management Decisions.....</i>	3-19
3.3.1.2	<i>Physical Resources</i>	3-19
3.3.1.3	<i>Biotic Resources.....</i>	3-22
3.3.1.4	<i>Cultural Resources.....</i>	3-30
3.3.1.5	<i>Interpretation</i>	3-35
3.3.1.6	<i>Collections</i>	3-39
3.3.1.7	<i>Visitor-Use and Opportunities (Recreation)</i>	3-40
3.3.1.8	<i>Leadership.....</i>	3-45
3.3.1.9	<i>Community Involvement and Marketing.....</i>	3-46
3.3.1.10	<i>Real Property Additions and Management.....</i>	3-48
3.3.1.11	<i>Infrastructure and Operations</i>	3-49
3.3.2	AREA-SPECIFIC GOALS AND GUIDELINES	3-53
3.3.2.1	<i>Blair Valley and Little Blair Valley</i>	3-53
3.3.2.2	<i>Carrizo Impact Area</i>	3-54
3.3.2.3	<i>Coyote Canyon.....</i>	3-54
3.3.2.4	<i>Lucky 5 Ranch Area</i>	3-56
3.3.2.5	<i>Sentenac Canyon.....</i>	3-57
3.3.2.6	<i>Indian Canyon.....</i>	3-57
3.3.2.7	<i>Grapevine Canyon</i>	3-58
3.3.2.8	<i>Vallecito/Campbell Ranch.....</i>	3-58
3.4	FUTURE PLANNING EFFORTS	3-61
3.4.1	CAMPING MANAGEMENT PLAN	3-61
3.4.2	ROADS MANAGEMENT PLAN	3-62
3.4.3	TRAILS MANAGEMENT PLAN	3-62
3.4.4	CULTURAL RESOURCES MANAGEMENT PLAN.....	3-63
3.4.5	NATURAL RESOURCES MANAGEMENT PLAN	3-64
3.4.6	INTERPRETIVE MANAGEMENT PLAN	3-65
3.4.7	FACILITIES PLAN	3-65

4 Environmental Analysis

4.1	SUMMARY	4-3
4.2	PROJECT DESCRIPTION	4-4
4.3	ENVIRONMENTAL SETTING	4-4
4.4	PLAN ALTERNATIVES	4-5
4.4.1	PREFERRED ALTERNATIVE.....	4-5
4.4.1.2	<i>Wilderness.....</i>	4-5

4.4.1.3	<i>Cultural Preserve</i>	4-6
4.4.1.4	<i>Backcountry</i>	4-6
4.4.1.5	<i>Focused-Use Zone I and Focused-Use Zone II</i>	4-6
4.4.1.6	<i>Information/Entrance Zone</i>	4-6
4.4.2	ALTERNATIVE 1	4-7
4.4.3	ALTERNATIVE 2	4-7
4.4.4	ALTERNATIVE 3 – ENVIRONMENTALLY SUPERIOR	4-7
4.4.5	NO PROJECT.....	4-8
4.5	ENVIRONMENTAL EFFECTS	4-8
4.5.1	PREFERRED PLAN—ENVIRONMENTAL EFFECTS	4-8
4.5.2	UNAVOIDABLE AND IRREVERSIBLE SIGNIFICANT ENVIRONMENTAL EFFECTS	4-9
4.5.3	SIGNIFICANT EFFECT AND PROPOSED MITIGATION	4-9
4.5.3.1	<i>Geological Resources (GR)</i>	4-10
4.5.3.2	<i>Water Resources (WR)</i>	4-10
4.5.3.3	<i>Biological Resources (BR)</i>	4-11
4.5.3.4	<i>Paleontological Resources (PR)</i>	4-12
4.5.3.5	<i>Cultural Resources (CR)</i>	4-13
4.5.3.6	<i>Aesthetic Resources (AR)</i>	4-15
4.5.3.7	<i>Recreation Resources (RR)</i>	4-16
4.5.4	EFFECTS FOUND NOT TO BE SIGNIFICANT	4-17
4.5.4.1	<i>Noise</i>	4-18
4.5.4.2	<i>Air Quality</i>	4-18
4.5.4.3	<i>Traffic</i>	4-19
4.5.4.4	<i>Hazardous Materials</i>	4-19
4.5.5	GROWTH-INDUCING IMPACTS	4-19
4.5.6	CUMULATIVE IMPACTS	4-20
4.5.7	BENEFICIAL ENVIRONMENTAL EFFECTS	4-21
4.5.8	MITIGATION AND MONITORING	4-21
4.6	PUBLIC COORDINATION	4-21
4.6.1	JANUARY 2003 PUBLIC REVIEW SUMMARY	4-22
4.6.2	JULY 2004 PUBLIC REVIEW SUMMARY	4-23

5 Tables

5.1	ADJACENT LAND USE	5-3
5.2	POTENTIAL SOIL SERIES	5-4
5.3	PLANT AND ANIMAL SENSITIVITY CODES	5-5
5.4	SENSITIVE PLANTS	5-9
5.5	SENSITIVE ANIMALS	5-11
5.6	MANAGEMENT ZONE MATRIX	5-13
5.7	ALTERNATIVES MATRIX	5-15
5.8	REASONABLE PROJECTION OF DEVELOPMENT	5-16

6 Figures

6.1	FACILITIES	
6.2	ADJACENT LAND OWNERSHIP	
6.3	TOPOGRAPHY	
6.4	PALEONTOLOGICAL SENSITIVITY	
6.5	GENERALIZED HABITAT	
6.6	MANAGEMENT ZONES -- PREFERRED ALTERNATIVE	
6.7	ALTERNATIVE 1	
6.8	ALTERNATIVE 2	
6.9	ALTERNATIVE 3	
6.10	PREFERRED ALTERNATIVE CLOSE-UPS SENTENAC CANYON, TAMARISK GROVE, BLAIR VALLEY	
6.11	PREFERRED ALTERNATIVE CLOSE-UPS COYOTE CANYON	
6.12	PREFERRED ALTERNATIVE CLOSE-UPS CULP VALLEY, BORREGO PALM CANYON, MT. PALM SPRINGS	
6.13	PREFERRED ALTERNATIVE CLOSE-UPS VALLECITO VALLEY	

7 Acronyms

7.1	ACRONYMS	7-3
-----	----------	-----

8 Bibliography

8.1	GENERAL	8-3
8.2	RANGER REPORTS	8-3
8.3	GEOLOGY (§2.2.1.2)	8-4
8.4	SOILS, HYDROLOGY, & BIOTIC (§2.2.1.3, §2.2.1.5, §2.2.2)	8-5
8.5	PALEONTOLOGY (§2.2.2.4)	8-7
8.6	CULTURAL (§2.2.3)	8-12
8.7	HISTORICAL	8-17
8.8	COLLECTIONS (§2.2.5)	8-18

9 Appendices

9.1	CULTURAL RESOURCES	9-3
9.2	HISTORICAL RESOURCES	9-14
9.3	SCOPE OF COLLECTIONS STATEMENT	9-25
9.4	NOTICE OF PREPARATION (NOP)	9-31
9.5	VISITOR-USE SURVEY (112 PAGES)	9-52

- 9.6 COYOTE CANYON PUBLIC USE PLAN (62 PAGES)
- 9.7 ECOLOGICAL CONDITIONS IN COYOTE CANYON (67 PAGES)